<u>REMARKS/ARGUMENTS</u>

Favorable consideration of this application is respectfully requested.

The presently submitted changes are made to correct a misspelling in Claim 1, cancel Claims 8 and 16, and add new Claim 19. Claim 19 is supported by original Claims 1 and 3. New Claim 19 adds no new matter.

In the parent application, U.S. Application 09/492,116, Claims 1-2, 5-6, 10-11, 14, 17, and 18 were rejected under 35 U.S.C. § 102(e) as anticipated by <u>Matsubayashi</u> (U.S. Patent 6,459,419). Claims 3-4, 7, 9, 12-13, and 15 were rejected under 35 U.S.C. §103(a) as unpatentable over <u>Matsubayashi</u> in light of <u>Kanno et al.</u> (U.S. Patent 6,434,266, herein "<u>Kanno</u>").

An interview was held with respect to U.S. Application 09/492,116 on February 18, 2004 to discuss the issues now addressed in the present case, attended by Examiner Wallerson, Examiner Carter, Ed Tracy, and Surinder Sachar. The applicant would like to thank the examiners for their time in conducting the interview. The differences between the amended claims and the cited references were discussed in detail. Arguments based on these discussions are presented below.

Claim 1 has been amended to correct the misspelling of "chroma."

Claims 1, 5, 10, 14, 17, and 18 were rejected under 35 U.S.C. § 102(e) as anticipated by <u>Matsubayashi</u>. Applicant respectfully traverses that rejection.

Independent Claim 1 recites, "a plane signal conversion unit which generates a plane signal by converting a color space expressed by an input color image signal to a plane."

<u>Matsubayashi</u> discloses an image processing apparatus and method in which image data in the form of three dimensional points from a linear coordinate system (R, G, B) are input to the apparatus (column 7, lines 53-62). The apparatus transforms these points into a cylindrical coordinate system (S, L, H) (column 7, line 63 to column 8, line 29). The

11

apparatus determines a color to assign the input image data based on the values of the S, L, and H coordinates (column 8, line 45 to column 10, line 3). However, applicant submits there is no teaching to convert the input color image signal to a *plane*, or to convert an image signal expressed on a color space to an image signal on a *plane*.

The outstanding Office Action cites Figure 6 and column 9, lines 15-27 of Matsubayashi as teaching this element. Applicant respectfully disagrees. Figure 6 shows the color of the input data in an (R, G, B) coordinate system, the values of the coordinates of the points in the (R, G, B) system for that input color, the values of the converted points in the (S, L, H) coordinate system, and the resulting color the (S, L, H) points will be displayed as by the apparatus. There is no teaching to convert an input color image signal to a plane.

The cited portion of the specification of Matsubayashi (column 9, lines 15-27) discusses the color conversion from the (R, G, B) system to the (S, L, H) system. Again, there is no teaching to convert an input color image signal to a plane. Since Matsubayashi does not disclose each and every element of Claim 1, applicant submits Claim 1 is not anticipated by Matsubayashi.

Claims 2-4 are dependent from Claim 1, which applicant respectfully submits is patentable. Thus, Claims 2-4 are also believed to be patentable.

Claim 5 recites, "a plane signal conversion unit which converts an image signal expressed on a color space to an image signal on a plane." The outstanding Office Action cites Figure 15 and column 11, lines 26-30 of Matsubayashi as teaching this element. Applicant respectfully disagrees. Figure 11 shows a three dimensional map of the colors that an embodiment of the disclosed apparatus can display. However, this embodiment is similar to the other disclosed embodiments in that the (R, G, B) input coordinates are converted to (S, L, H) coordinates. The (S, L, H) coordinate values are then used to determine which color

on the color map the input signal should be mapped to (column 11, lines 16-20). There is no teaching to convert an image signal expressed on a color space to an image signal on a plane.

The cited portion of the specification of Matsubayashi (column 11, lines 26-30) discusses the coordinate transformation from the (R, G, B) system to the (S, L, H) system. Again, there is no teaching to convert an image signal expressed on a color space to an image signal on a plane. Since Matsubayashi does not disclose each and every element of Claim 5, applicant submits Claim 5 is not anticipated by Matsubayashi.

Claim 6 is dependent from Claim 5, which applicant respectfully submits is patentable. Thus, Claim 6 is also believed to be patentable.

Independent Claims 10, 17, and 19 recite similar elements to Claim 1. Applicant respectfully argues that Claims 10, 17, and 19 are patentable over the cited references for the reasons discussed above with respect to Claim 1.

Claims 11-13 are dependent from Claim 10, which applicant respectfully submits is patentable. Thus, Claims 11-13 are also believed to be patentable.

Independent Claims 14 and 18 recite similar elements to Claim 5. Applicant respectfully argues that Claims 14 and 18 are patentable over the cited references for the reasons discussed above with respect to Claim 5.

Claims 7 and 15 were rejected under 35 U.S.C. §103(a) as unpatentable over Matsubayashi in light of Kanno.

Kanno discloses an image processing method and apparatus in which image data in the form of three dimensional points from a linear coordinate system (R, G, B) are input to the apparatus (Figure 1 and column 5, lines 36-38). The apparatus transforms these points into a cylindrical coordinate system (H, S, I) (column 5, lines 54-59). The apparatus converts the (H, S, I) coordinates back to a (R, G, B) coordinate system (column 5, lines 59-65). The (R, G, B) coordinates are converted to a (C, M, Y) coordinate system to correspond to the

colors of a printer's toners (column 5, lines 45-51). The (C, M, Y) coordinates are then spatial filtered and then sent to a printer (column 5, lines 51-53). However, applicant submits there is no teaching to convert the input color image signal to a *plane*, or to convert an image signal expressed on a color space to an image signal on a *plane.*

Claim 7 recites, "a plane signal conversion unit which converts an image signal expressed on a color space to an image signal on a plane." As discussed above, neither Matsubayashi nor Kanno teach or suggest this element. Since the cited references do not teach or suggest all the elements of Claim 7, applicant respectfully argues that Claim 7 is patentable over the cited references.

Claims 8 and 9 are dependent from Claim 7, which applicant respectfully submits is patentable. Thus, Claims 8 and 9 are also believed to be patentable.

Independent Claim 15 recites similar elements to Claim 7. Applicant respectfully argues that Claims 15 is patentable over the cited references for the reasons discussed above with respect to Claim 7.

Claim 16 is dependent from Claim 15, which applicant respectfully submits is patentable. Thus, Claim 16 is also believed to be patentable.

The present application is believed to be in condition for a full and thorough examination on the merits. An early and favorable consideration of the present application is hereby respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Surinder Sachar

Gregory J. Maier
Attorney of Record
Registration No. 25,599

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)

I:\ATTY\ET\249625US\249625US-PRELIMAMD.DOC

Surinder Sachar
Registration No. 34,423